

EDWARD C. THOMAS
Director
Software Engineering Center
US Army Communications-Electronics Command
Fort Monmouth, New Jersey



Edward C. Thomas was appointed to the Senior Executive Service and as Director of the USACECOM Software Engineering Center effective September 9th, 2001. In this capacity, he leads CECOM's efforts to provide state-of-the-art software engineering products and services throughout the Army and the Department of Defense. These products and services include: system level software engineering for over 400 individual battlespace systems, logistics systems, and management information systems; system-of-systems level software integration; software architecture design and implementation; software technology assessment and application; and world-wide technical support to deployed systems. He leads a global organization of over 3,000 military, civilian, and industry employees in ten major locations and manages an annual budget of approximately \$300 million. Prior to this assignment, he served as the Deputy Director and Acting Director of the CECOM Software Engineering Center.

Mr. Thomas began his career in government service in 1974 as a Budget Analyst intern for the US Army Electronics Command and has progressed through increasingly responsible positions at Fort Monmouth. In 1987, he was promoted to GS-15 as the CECOM Budget Officer where he provided staff oversight to CECOM's multi-appropriation budget, rendered fiscal policy advice to the Command, and provided program and budget analysis support to the Program Executive Officers and Project Managers. Following that assignment, he became CECOM's Deputy Chief of Staff for Operations and Plans (DCSOPS) where he designed, developed, and implemented Command-wide strategic, operational, and tactical mission resource plans, designed and performed studies and analyses for the Command and PEOs, managed the DoD C3I Federally Funded Research and Development Center (FFRDC) program for the Army, and provided a central capability for organizational and mission integration within CECOM and among CECOM and its customers.

Mr. Thomas was awarded a Bachelor of Arts degree in Political Science at The College of New Jersey (Trenton State College) in 1974, a Master of Business Administration degree at Fairleigh Dickinson University in 1980, and a Master of Science degree in National Resource Strategy at the Industrial College of the Armed Forces (ICAF) in 1995. He also completed the Army Advanced Resource Management Course at Syracuse University in 1983, the Defense Senior Acquisition Course at ICAF in 1995, and the Advanced Program Management Course at the Defense Systems Management College (DSMC) in 1997. He has been a member of the Army Acquisition Corps since 1994.

Mr. Thomas has received numerous awards, including the decoration for Meritorious Civilian Service in 1986, the decoration for Superior Civilian Service in 1992, 1997 and 2001, and the Commander's Award for Civilian Service in 1998. He was selected as the top CECOM employee for 1991 and as the CECOM Executive of the Year in 1997.

He is a member of the Association of the Industrial College of the Armed Forces (ICAF), the Association of the US Army (AUSA), and the American Society of Military Comptrollers (ASMC).



ENTERPRISE SYSTEMS ENGINEERING

MR. EDWARD C. THOMAS

DIRECTOR, CECOM SOFTWARE ENGINEERING CENTER

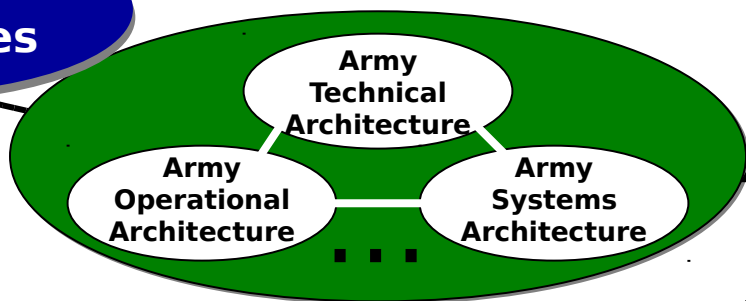
(732) 532-8207

edward.thomas@mail1.monmouth.army.mil

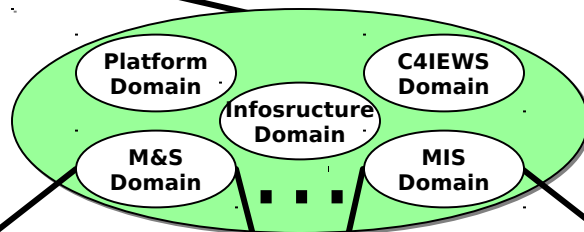


ARMY ENTERPRISE CONTEXT

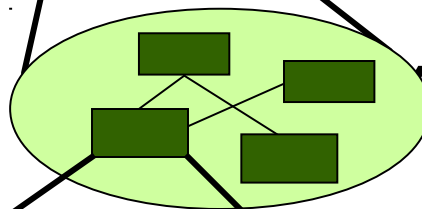
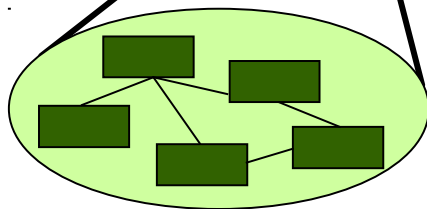
**Joint/DoD
Architectures**



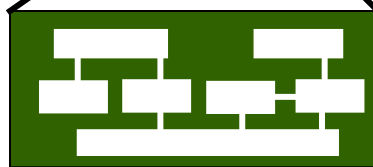
Army Enterprise



Army Domains



**Army Systems of
Systems**



**Individual Army
System & Software**

ECOM Bottom Line: THE WARFIGHTER



TODAY



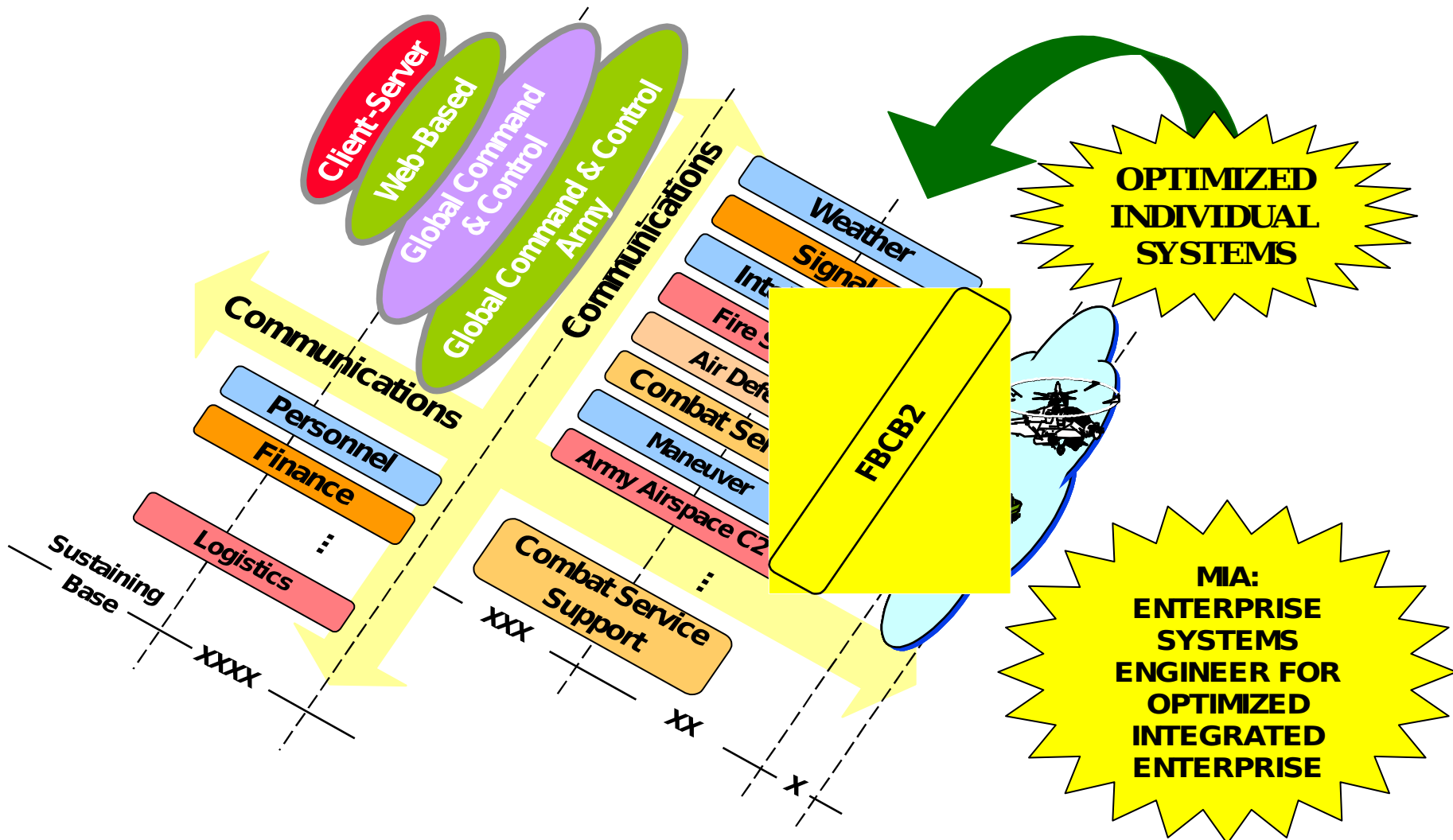
□ CHALLENGES:

- INTEGRATING PLAN (for migration & convergence)
- UP-FRONT ENGINEERING (for enterprise integration)
- MIGRATION/TRANSITION OF TECHNOLOGY (optimally)
- UNIFIED REQUIREMENT
- FUNDING FOR HORIZONTAL INTEGRATION
- SYNCHRONIZATION
- COMPLIANCE (with standards)



ARMY ENTERPRISE SYSTEMS ENGINEERING

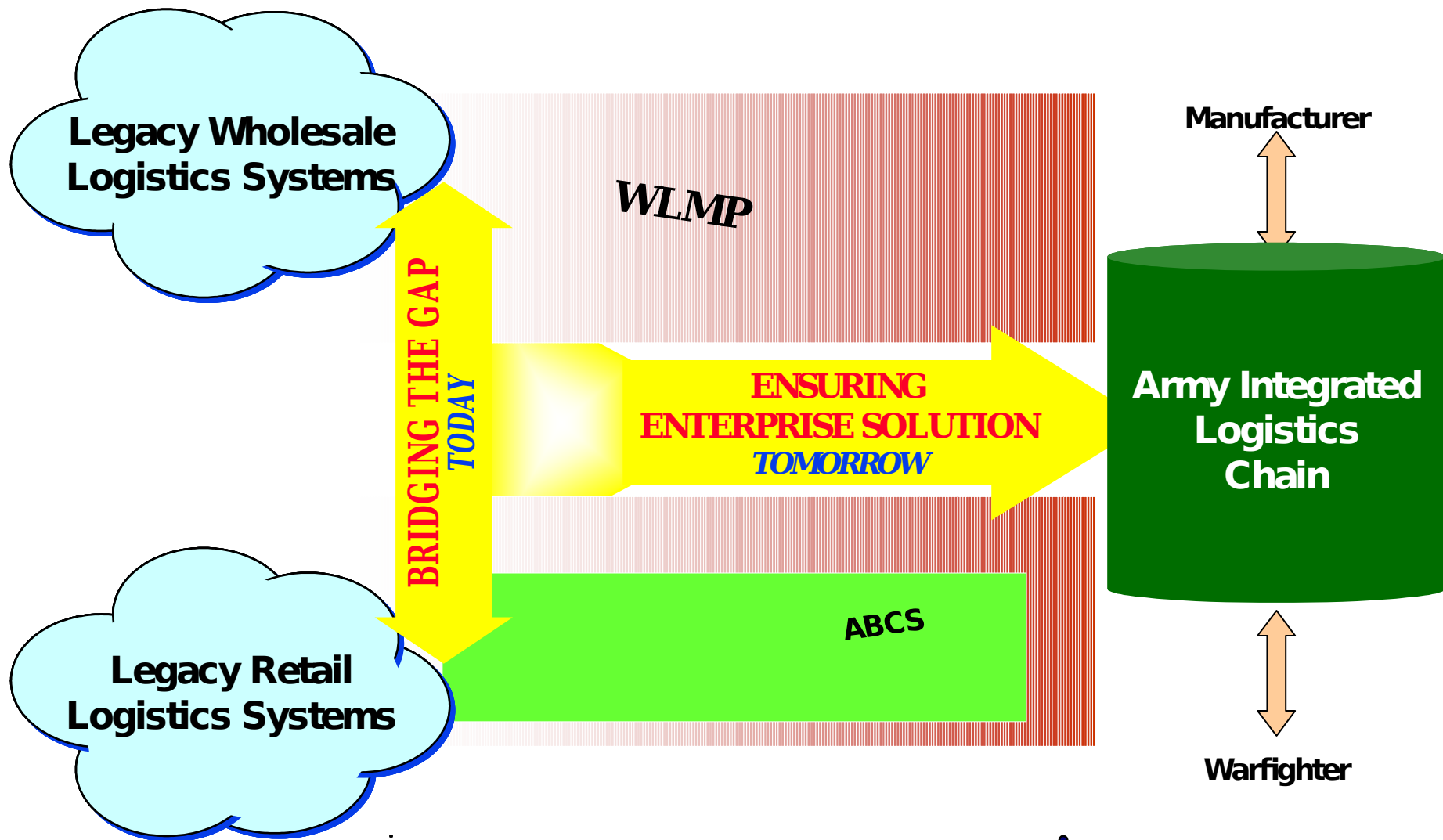
Ensures Integrated Enterprise



ECOM Bottom Line: THE WARFIGHTER



EXAMPLE - LOGISTICS CHALLENGE



ECOM Bottom Line: THE WARFIGHTER



EXAMPLE - AKM CHALLENGE

Army's Infostructure

LOGISTICS

FINANCE

INTELLIGENCE & ELECTRONIC WARFARE

COMMAND AND CONTROL

Communications

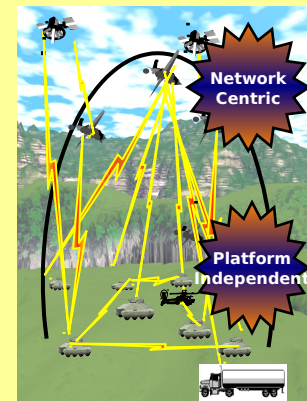
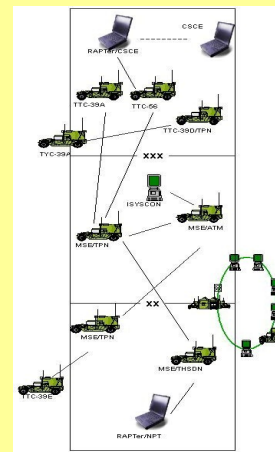
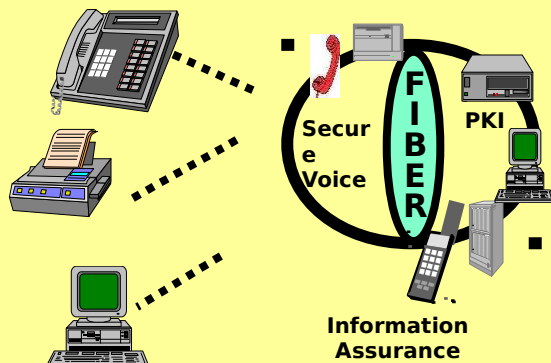
DESK TOP

ON POST

**LONG
HAUL**

THEATER

TACTICAL



Funding Strategy

Best Business Practices

Infrastructure Consolidation

Army Knowledge Online

Human Capital

AKM Goals

ADOPT

ADAPT

DEVELOP

ECOM Bottom Line: THE WARFIGHTER

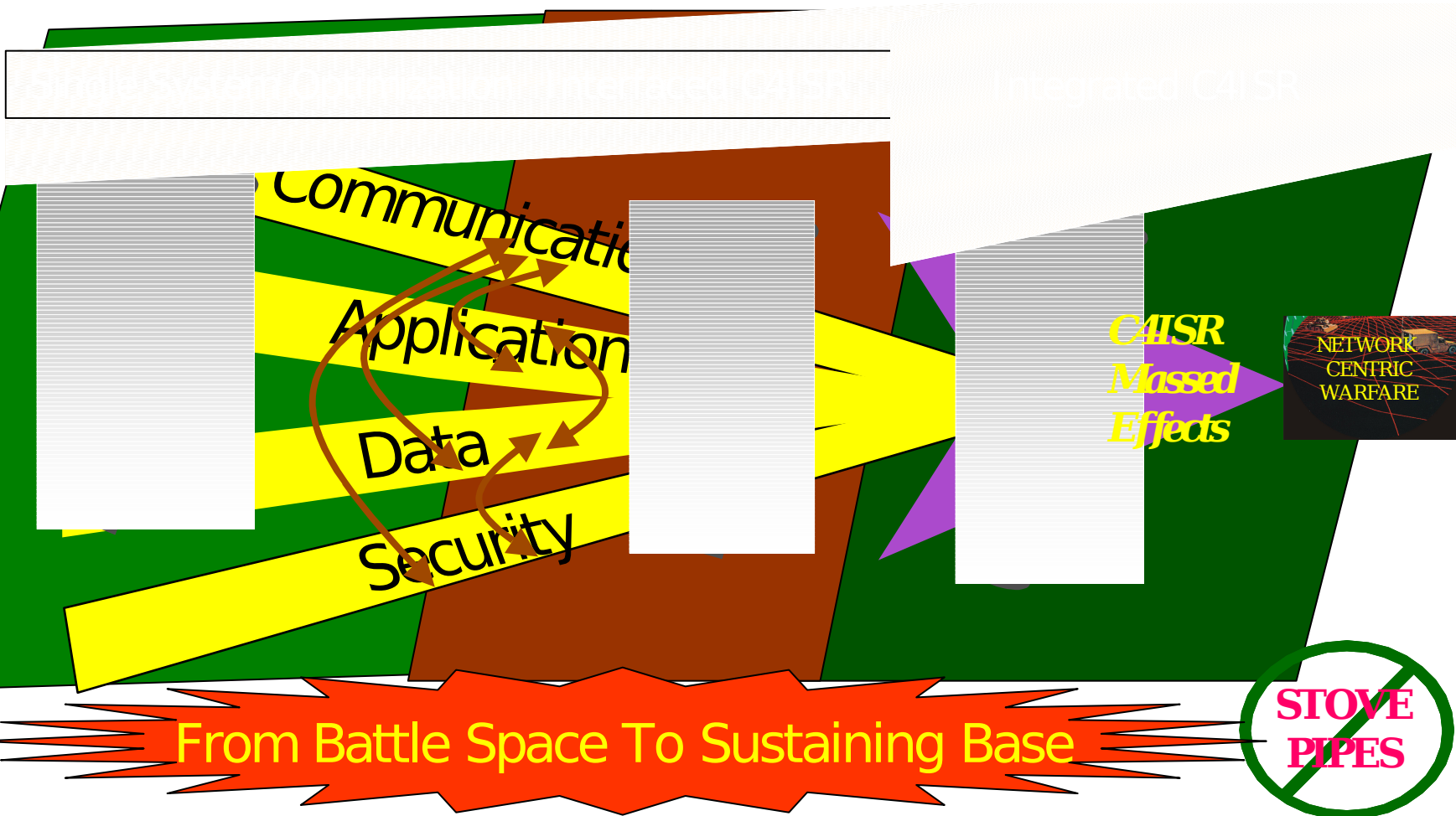


FUTURE DESIRED STATE

- SEAMLESS VERTICAL & HORIZONTAL C4ISR SYSTEMS
INTEGRATION ACROSS THE SPECTRUM OF OPERATIONS TO
MEET THE NEEDS OF THE OBJECTIVE FORCE**
- ☐ **FROM THE BATTLESPACE TO THE SUSTAINING BASE
(Tactical, Strategic, Installation)**
- ☐ **TODAY AND INTO THE FUTURE
(Legacy, Interim, Objective)**
- ☐ **SPANNING FUNCTIONAL DOMAINS
(Fire Support, Intel, Combat Service Support, ...)**



FUTURE DESIRED STATE



ECOM Bottom Line: THE WARFIGHTER



WHERE WE ARE HEADED

EXPAND ON-GOING ARMY ENTERPRISE SYSTEM ENGINEERING ACTIVITIES

DEVELOP & OVERSEE OVERARCHING ARMY ENTERPRISE SYSTEM ENGINEERING MASTER PLAN

- ARMY-WIDE ENTERPRISE ARCHITECTURE SUPPORT
- RISK MITIGATION THROUGH ARMY-WIDE ENTERPRISE PILOTS
- TECHNOLOGY INSERTION FACILITATION

RESOLVE CROSS-CUTTING TECHNICAL ISSUES, IDENTIFY OPPORTUNITIES, MAKE RECOMMENDATIONS

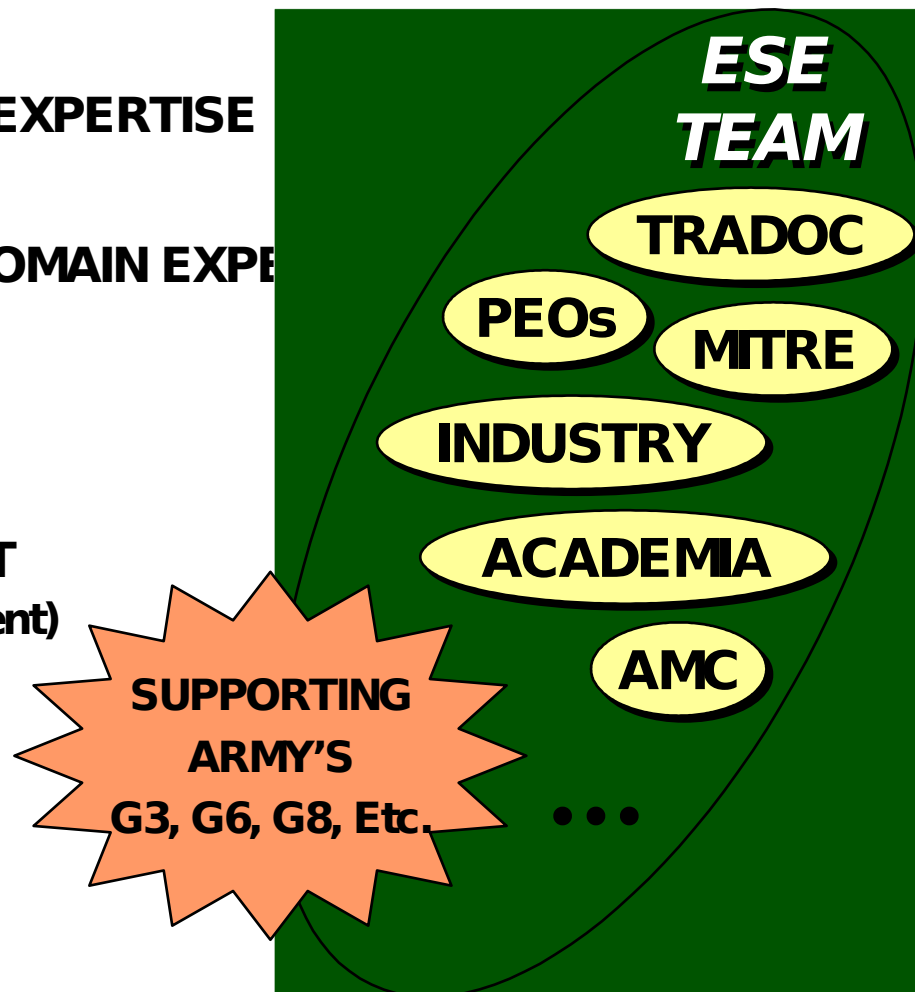
PROVIDE TECHNICAL CONSULT/EXPERTISE

ASSIST & VALIDATE COMPLIANCE WITH ENTERPRISE SYSTEM ENGINEERING MASTER PLAN



FULLY ENGAGED ACROSS SPECTRA OF ACTIVITIES

- ◆ **SYSTEMS ENGINEERING EXPERTISE**
(ASEO, J TA, Tools, ...)
- ◆ **BROAD RANGE OF C4ISR DOMAIN EXPERTISE**
(C2, Comm, IEW, FS, AV, MIS, ...)
- ◆ **TECHNOLOGY EXPERTISE**
- ◆ **FULL LIFE-CYCLE INVOLVEMENT**
(R&D, Post Development/Deployment)



ECOM Bottom Line: THE WARFIGHTER



WHAT WE ARE DOING

EA (PEO C3T)-TJ TN

FCS C4ISR Architecture

Enterprise Applications Architecture

ISMP

Other Individual Efforts

CECOM ESE Team



- Define Enterprise Architecture with plan for migrating from “as is” to objective state
- Synchronize on-going activities to achieve common goal
- Identify shortcomings with current activities and initiate efforts to resolve

**INTEGRATED
OBJECTIVE
FORCE**

CECOM Bottom Line: THE WARFIGHTER



WHAT ARE WE DOING

- **Executive Agent (PEO C3T) - Theater Joint Tactical Network**
 - Ensure Interoperability and synchronization among Service and Agency programs acquiring network components
- **FCS C4ISR Architecture**
 - Developed architectural tenets to support Network Centric Warfare
- **ENTERPRISE APPLICATIONS ARCHITECTURE**
 - Define framework for developing applications compliant with Enterprise Architecture
- **Installation Information Infrastructure Modernization Program (IIMP)**
 - Upgrade the information infrastructure to provide digital connectivity across installations, active support activities and deployed Forces.



HOW INDUSTRY CAN HELP

- **THINK ENTERPRISE SOLUTIONS**
- **PROVIDE FEEDBACK. IT IS CRITICAL.**
- **MORE TO COME**



Questions?



Answers &

ECOM Bottom Line: THE WARFIGHTER